Castlemaine Naturalist

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Monthly newsletter of the
Castlemaine Field Naturalists Club Inc.

Growling Grass Frog *Litoria raniformis*
Photo: Lisa Cox

Biodiversity at Coliban Water

Cathrine Harboe-Ree. Photos by Lisa Cox

Our presentation on Friday 19 May was an informative behind-the-scenes look at Coliban Water's environmental programmes, delivered by Lisa Cox, Environmental Specialist – Projects. Coliban Water has responsibility for wastewater treatment, reclaimed water supply, water treatment and supply and rural water supply in an area over 16,500 square kilometres. They directly manage 4,500 hectares of land. This incorporates Dja Dja Wurrung, Yorta Yorta and Taungurung country, the Malmsbury, Lauriston and Upper Coliban Reservoirs and the Coliban Main Channel, as well as a number of water treatment plants. Lisa spoke about the work she does as an environmental specialist within Coliban Water and her focus on planning, strategy and skills development.

Coliban Water is aware of twenty-six threatened plant species, thirty-one threatened fauna species and six threatened communities in the land and waterways it manages. Worryingly, these numbers have escalated in the past few years, which is an Australia-wide trend due to loss of habitat and climate change.

The threatened communities are: Goldfields Creekline grassy woodland; Victorian temperate woodland birds; Northern Plains grassland; White Box – Yellow Box – Blakely's Red Gum grassy woodland and derived native grassland; Grey Box grassy woodland and derived native grasslands of South-eastern Australia; and, natural grasslands of the Murray Valley plains (noting that Coliban Water covers territory right up to the Murray River).

Amongst the threatened plant species, Coliban Water has recently discovered Wiry Bossiaea (*Bossiaea cordigera*) at the Trentham Water Treatment Plant and Hairy Anchor Plant (*Discaria pubescens*) at the Upper Coliban Reservoir, and there are many other threatened species being monitored.

Regarding the threatened fauna species, Lisa spoke about the challenges to Coliban Water of maintaining suitable habitat for platypuses, for example, while also releasing treated waste-water into our local waterways. On the other hand, sewerage farms are excellent for biodiversity, providing habitat for turtles, frogs and waterbirds. Other threatened species being monitored and, where possible, protected, include phascogales, Krefft's (Sugar) Gliders and woodland birds such as Speckled Warblers and Crested Bellbirds. Eastern Bent-wing bats, which occur here in the northern-most extent of their range, and Brown Toadlets are the focus of two scientific research projects.

Wiry Bossiaea.
(*Bossiaea cordigera)*

One of the projects Lisa is involved with, Taskforce Growler, (https://wintonwetlands.org.au) involves the captive breeding of Growling Grass Frogs (*Litoria raniformis*) from the Bendigo Water Reclamation Plant for release in the Winton Wetlands, which are slowly being rehabilitated following a lengthy period as a man-made lake.

Coliban Water is aware that its land can provide shelter and protection for many species, and much of Lisa's work concentrates on this. Apart from monitoring, some reserves are fenced to exclude predators and people, and nest boxes and cameras have been installed.

Hairy Anchor Plant.
(*Discaria pubescens*)

Another project Coliban Water is developing is the Coliban Main Channel as an uninterrupted biolink, or corridor, from Bendigo to Fryers Ridge, to be of benefit to both fauna and flora. Lisa used the word-chain AVOID – MINIMISE – OFFSET – ENHANCE to summarise Coliban Water's approach to vegetation clearance. Coliban Water works with consultants and community groups to undertake ecological surveys, and undertakes careful assessment of the environment prior to any disruptive work. For example, wombat burrows are checked before any earthworks begin.

Eastern Bent-wing Bat
(*Miniopterus fuliginosus)*

Brown Toadlet
(*Pseudophryne bibronii)*

May Excursion – Fungi and Mosses on Mt. Alexander

Euan Moore

A last-minute change meant that our planned excursion to McCay Reservoir with Coliban Water staff had to be postponed until June. To accommodate this we brought forward our June excursion with an emphasis on the fungi of the region.

We decided to repeat our excursion from two years ago when we visited Mt Alexander originally lead by Joy Clusker. This time it was DIY with 14 members and friends searching the upper part of Whiskey Gully, opposite Dog Rocks, for fungi and mosses. We were earlier in the season than on our previous visit which, along with recent dry weather meant that the variety was not as great as on our previous visit. In spite of this the group had a number of interesting finds with more than 20 species of fungi and several species of moss located. The photographers in the group were urged to load their material to iNaturalist and add their sightings to the Fungimap Australia Project.

The group also found a number of mosses during the afternoon.

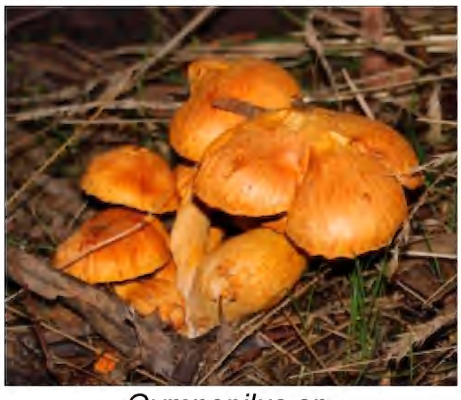
The photos below show some of the species found during the afternoon.

Pixie's Parasol (*Mycena interrupta)*
Photo: Mez Woodward

Mycophiles at work.
Photo: Helen Lawrence

Parasitic fungus growing on fungus *Amanita sp.* *Photo: Euan Moore*

An ascomycete, probably *Chlorociboria sp.*
Photo: Russell Stanley



Gymnopilus sp.
Photo: Russell Stanley

Using a mirror to examine the gills.
Photo: Jenny Rolland

Resupinate fungus. *Photo: Euan Moore*

Mycena sp. Photo: Russell Stanley

Yellow Parasole
(*Leucocoprinus fragilissimus*
Photo: Mez Woodward

Gilled fungus
Photo: Mez Woodward

Moss *Triquetrella papillata*.
Photo: Jenny Rolland

Observations

Fri 12th May, Rosemary Turner - two Black-chinned Honeyeaters were seen along Forest Creek, Happy Valley while she and Peter were doing a regular bird survey. Rosemary noted that they had not seen this species there before, nor was it on Ern Perkin's list for that survey site.

Richard Piesse had a wonderful close encounter with two Lyrebirds along a track in Sherbrook Forest recently.

Eriochilus sericeus - The Plains Bunny Orchid

Russell Stanley

An interesting addendum to the report of our outing to the Maldon area last month. I returned to the site on the 10th of May to see how things had changed and to get photos of the leaves of the Bunny Orchids that we had seen. As expected, most of the orchid flowers we had seen were finished or finishing.

Now the interesting thing about many of the eastern states' Bunny Orchids, and some other types of autumn flowering orchids, is that the leaves develop after the flower, whereas for spring flowering species it is generally the other way round. This means that when you see the Bunny Orchid flowers you usually don't get to examine the leaves.

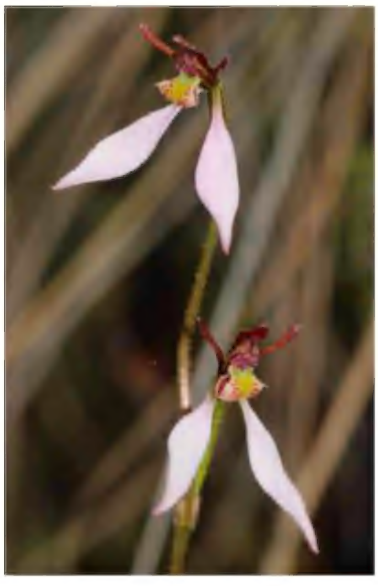
Why all this interest in the leaves? The flowers of different species of *Eriochilus* are virtually identical. Species are determined by other characteristics, particularly the leaf, appearance of the whole plant and growth habitat.

Victoria has only 2 recognised species of Bunny Orchid: *Eriochilus cucullatus* and *Eriochilus magenteus. Eriochilus cucullatus* is the species we all think we are familiar with. It has a number of common names including 'Parson's Bands', 'Eastern Bunny Orchid' and 'White Bunny Orchid'. Australia's foremost orchid expert, David L. Jones describes the leaf of *Eriochilus cucullatus* as '**ground hugging, ovate, undeveloped at flowering, smooth, glabrous and green beneath'.** (If you look up glabrous it means '**lacking hair** or the like'). [*Eriochilus magenteus* is a Bunny Orchid species you might encounter in the high country of North-east Victoria. It is a deep pink colour and has a similar leaf – smooth and hairless – to *Eriochilus cucullatus*.]

The best match for these hairy and ribbed leafed Bunny Orchids is ***Eriochilus sericeus***, the **Plains Bunny Orchid**. This orchid species (also known as *Eriochilus collinus ssp. sericeus* in some quarters) gained species status in 2017 in South Australia. It is widespread through much of S.A.'s wheatbelt but mysteriously stopped existing at the Victorian border! David L. Jones describes the leaf of this species as **'ground hugging, ovate to heart shaped, upper surface dark green with indistinct ribs and soft crinkly white hairs, lower surface green with immersed veins'**.

Suspicions that Victoria has more than 2 species of Bunny Orchid have been around for a while. Since the publication of up-to-date guides for South Australia (Native Orchid of South Australia – a Field Guide by June Niejalke with Robert Bates 2022), New South Wales (Guide to Native Orchids of NSW and ACT by Lachlan Copeland and Gary Backhouse 2022) and, of course, David Jones' Complete Guide to Native Orchids of Australia 2021, a number of orchid enthusiasts have been checking *Eriochilus* leaves in Victoria to see if there are any species with an interstate pedigree that have been under our noses all along! This is one such example.

The identity has been confirmed by our South Australian colleagues, author June Niejalke and Robert Bates who originally named the orchid in 2016/2017.



Our Maldon *Eriochilus sericeus.* The flower was photographed on 15th April before leaves had developed. The leaves were photographed on 10th May after most flowers had ceased blooming. Leaves - **Not smooth, not hairless.** *Photos: Russell Stanley.*

From the Committee

Conducting vegetation surveys is an important activity for our club. In particular we survey for threatened species and vegetation communities in our district. Current surveys are as follows:

Mapping the range of the threatened Fryerstown Grevillea – we have conducted 2 surveys to check known records of this species in Fryers Ridge and Porcupine Ridge. In spring we will do more surveys to check outlier records and to more fully assess the range of this species. Information about this project can be found on the Fryerstown Grevillea project page on our website.

Repeating quadrat surveys of vegetation communities – standardized quadrat vegetation surveys were established at more than 100 sites in the Castlemaine region by Ern and Lesley Perkins in the 1990s. Many were as paired surveys to assess the impacts of planned burns. We are now repeating some of these surveys especially in areas where there are threatened species or where planned burns are proposed.

Please check the Excursions page on our website for details of scheduled surveys and how you can help. All levels of experience are welcome. Enquiries to: castlemainefnc@hotmail.com

Membership renewal reminder

Members are reminded that membership renewals are now overdue.
This June issue of the Newsletter will be the last for non-renewals.

Disclaimer: The opinions expressed in this newsletter are those of the contributors and not necessarily those of the club.

COMING EVENTS

A date for your diary!

Saturday 9 September – Sunday 10 September: Ballarat excursions

We are planning a weekend near Ballarat in September, with a visit to a private wildlife sanctuary at Berringa on the Saturday afternoon and evening, and an orchid/bird walk in Clarkesdale Sanctuary on the Sunday morning. Attendees can either camp (suitable for caravans) on the Saturday night in the Clarkesdale Sanctuary (bookings required) or stay in nearby accommodation. Our Friday Monthly Meeting will be held as usual in the Uniting Church Hall, Castlemaine. Further details will be available in the next newsletter.

Meeting: Friday June 9th, 7.30pm by Zoom

Speaker: Louise Saunders "Botanical art – inspiring wildlife conservation"

The June meeting will be the first of our 3 winter meetings by Zoom (see back page for how to join) for 2023 with our speaker being Louise Saunders, a botanical artist originally from Benalla in Victoria's North East. Louise has had a particular interest in illustrating the ground orchids of NE Victoria and since relocating to Queensland, also the subtropical flora and fauna. She has been awarded an Order of Australia for her contributions to art and conservation. Louise will be talking about her career as a botanical artist and illustrating this with images of her work.

Excursion: Saturday June 10th, 1.30pm, "McCay Reservoir"

Leader: Kylie McLennan (Coliban Water)

Rescheduled from May. Due to illness, Kylie was unable to lead this trip in May but we are pleased that she can lead this field trip to McCay Reservoir for our June excursion. This will be a rare opportunity to see this site, which is not open to the public. The reservoir, which is the source of Castlemaine's water consists of approximately 180ha and a variety of vegetation classes and quality, therefore providing some unique diversity. Kylie will show us the reserve and explain how water is transferred from Malmsbury Reservoir via the Coliban Main Channel and Poverty Gully Channel tunnel, via a channel through the hill.

Meet: 1.30pm departure from the car park opposite the Castle Motel, Duke St.

Bring: Water, afternoon tea, sturdy shoes and if necessary, wet weather gear.

Boot Hygiene: due to the concern of spreading plant pathogens in our soils, please clean your boots thoroughly before leaving home (scrub off dirt and remove seeds). On arrival at the reservoir, we will spray the soles of our boots with Phytoclean. Again, we will brush etc. off our boots before leaving.

The Field Trip will be cancelled in extreme weather conditions.

Castlemaine Field Naturalists Club

PROGRAM

Monthly meetings will be held on-line via Zoom again during the winter months (June, July and August) commencing at 7.30pm. Please email Peter Turner at munrodsl@iinet.net.au to register and receive the link for joining the Zoom meeting.

If you have observations to report at the meeting and photo(s) to illustrate your report, please email them to Euan Moore (calamanthus5@bigpond.com) by noon on the day of the meeting.

Excursions (Saturday following the general meeting) leave from the car park opposite the Castle Motel, Duke Street at 1.30pm sharp unless stated otherwise.

See 'Coming Events' page for more details about June events.

Fri June 9 Meeting 7.30pm (by Zoom). Speaker: Louise Saunders "Botanical art – inspiring wildlife conservation".

Sat June 10 Excursion 1.30pm. Leader: Kylie McLennan (Coliban Water), "McCay Reservoir".

Fri July 14 Meeting 7.30pm (by Zoom). Speaker: Matt West (Melb Uni Zoology) "Protecting frogs from Chytrid fungus".

Sat July 15 Excursion 1.30pm. Leaders: Euan Moore & Richard Piesse, "Maldon Historic Reserve, monitoring our native flora".

Fri August 11 Meeting 7.30pm (by Zoom). Speaker: Tracy Lyten & Fiona Jackson (Skylos Ecology) "The role of detection dogs in conservation".

Castlemaine Naturalist - email newsletter material to: newsletter.cfnc@gmail.com
* Deadline for the July edition: 30th June

Club website (Webmaster: Ron Wescott) – www.castlemainefieldnaturalists.org.au

Subscriptions for 2023 (Membership forms and payment details on CFNC website)
Ordinary membership: Single $35, Family $50
Pensioner or student: Single $25, Family $30
Subscription includes the monthly newsletter, Castlemaine Naturalist.

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